Claims

[c1]   What is claimed is: 1. A method of building a native XML object database, comprising the step of representing structured data in native XML files.

[c2]   2. The method according to claim 1, further comprising steps of: creating one or more directories in the file system; creating one or more XML files under said directories.

[c3]   3. The method according to claim 2, wherein the directory creating step further comprises the step of mapping said structure of data to file system paths.

[c4]   4. The method according to claim 2, wherein the XML file creating step further comprises the step of creating one XML file for each instance of said data.

[c5]   5. The method according to claim 4, wherein the created XML file has a flat structure.

[c6]   6. The method according to claim 1, further comprising the step of mapping object-oriented design to dynamically generated API.

[c7]   7. The method according to claim 6, wherein the dynamic API is generated in Java.

[c8]   8. The method according to claim 6, wherein the dynamic API embeds links for said structure of data.

[c9]   9. A system for building a native XML object database, comprising means for representing structured data in native XML files.

[c10]   10. The system according to claim 9, further comprising means for encrypting selected data fields in said native XML files.

[c11]   11. The system according to claim 9, further comprising means for delivering data access control to each instance of data.

[c12]   12. The system according to claim 9, further comprising means for minimizing damages of data corruption to instances of data.

[c13]   13. The system according to claim 9, further comprising means for minimizing database memory usage.

[c14]   14. The system according to claim 9, further comprising means for speeding up database operations.

[c15]   15. A computer program product for building a native

XML object database, the computer program product embodied on one or more computer-readable media and comprising computer-readable program code means for representing structured data in native XML files.

[c16] 16. The computer program product according to claim 15, further comprising computer-readable program code means for mapping object-oriented design to dynamically generated Java API.

[c17] 17. The computer program product according to claim 16, further comprising computer-readable program code means for: generating constructors for building database handlers given file paths in said file system; generating getters and setters for data fields.

[c18] 18. The computer program product according to claim 15, further comprising computer-readable program code means for: creating/updating/deleting identity of said data in said XML files; creating/updating/deleting values or list of values of said data in said XML files; creating/updating/deleting references or list of references to other values under said structure.